

Application No. 09/482,969

REMARKS

Applicant thanks the Examiner for the interview of May 8, 2003.

The Examiner rejects Claims 1-3, 6-7, and 23 under 35 U.S.C. § 102(e) as being anticipated by Goldberg et al. (U.S. 6,226,360); Claims 4, 8, 10-12, 14-18, 20-22, and 24-25 under 35 U.S.C. § 103(a) as being unpatentable over Goldberg et al. in view of Jesurum et al. (U.S. 5,430,792); Claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Goldbcrg et al. in view of Kelly et al. (U.S. 4,941,168); and Claims 9 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Goldberg et al. in view of Jesurum and further in view of Kelly et al.

Applicant respectfully traverses the Examiner's rejections. None of Goldberg et al., Jesurum et al., or Kelly et al., teach or suggest, individually or collectively, at least the following italicized language in Claims 1, 8, and 15:

1. A method for use in managing outgoing calls in a call center, comprising:

initiating a call to a first party from the call center via a communication medium;

monitoring said communication medium for signals received from a location associated with said first party after said step of initiating a call;

detecting an initial audible signal received from the first party location via said communication medium, *wherein the initial audible signal is the first signal detected after said call is answered*;

initiating processing of said initial audible signal in a call classifier to determine a characteristic of said audible signal, *said step of initiating processing includes initiating processing that will analyze whether said initial audible signal was generated by a live party during the call*; and

playing a prerecorded greeting over said communication medium during said call, *said prerecorded greeting being played during a time period when said call classifier is processing said initial audible signal, wherein the analysis whether said initial audible signal was generated by a live party is the initial analysis made during the call*.

Application No. 09/482,969

8. A method for use in managing an outgoing call comprising the steps of:

placing an outgoing call to a remote party location over a communication network;

processing an initial signal received from said remote party location during said call to determine a source type of said initial signal, wherein the processed signal is the first signal detected after said call is answered;

playing a prerecorded greeting to said remote party location during said step of processing, wherein said step of playing a prerecorded message includes detecting a period of silence after receipt of said initial signal and initiating playback of said prerecorded greeting in response thereto; and

after said prerecorded greeting has ended, establishing a talk path between a local agent and the remote party location when it is determined that said initial signal is a voice signal that was generated by a live party during the call, wherein the determination whether the initial signal is a voice signal that was generated by a live party during the call is the initial such determination made during the call.

15. A system for use within a call center, comprising:

a call processing unit operable to place a call to a remote party location via a communication network;

a call classifier unit operable to determine when said call is answered, detect an audible signal from the remote party location, and analyze a first detected signal received from said remote party location to determine whether said first detected signal originated from a live party during the call, wherein the first detected signal is the first signal detected by the call classifier unit after said call is answered;

a message playback unit operable to play back a prerecorded message to said remote party location while said call classifier unit is analyzing said first detected signal; and

a switch unit operable to establish a talk path between a local agent position and said remote party location when it is determined by said call classifier unit that said first detected signal originated from a live party during the call, wherein the determination whether the first detected signal is a voice signal that was generated by a live party during the call is the initial such determination made during the call.

As shown by the above claims, the present invention is directed generally to the playing of a message, such as a prerecorded greeting, during processing of the initial or first audible signal detected during a call. The playing of the greeting during processing can reduce the frequency of

Application No. 09/482,969

hang ups by callees. The processing step is typically performed by a call classification unit, which determines whether the source of the signal is a live person or an answering machine.

Goldberg et al. is directed to an automated call controller for automatically placing phone calls to a series of selected telephone numbers; monitoring parameters associated with the call (such as the duration of the speech energy in the answering greeting before the first brief silent "pause"); based on the analysis of the monitored parameters, predicting using a decision model whether the call will be or has been answered by a live person or an answering machine; and, based on the prediction, determining a message start time for playing the pre-recorded message by the call controller. The decision model can analyze the monitored real-time parameters of the immediate phone call and the historical data from any previous phone calls made to the intended recipient to further enhance the prediction as to how the immediate call will be answered and continue to analyze the monitored parameters during the entire course of the call (after play of the message) to assess whether the message was effectively delivered. "Based on this prediction, decision model 110 will direct call controller 100 to play the pre-recorded message at a specified time after the phone call is answered." (Col. 3, lines 57-60.)

Unlike the claimed invention, the call controller of Goldberg et al. plays the message not before but *after* the determination is made whether a live person or answering machine answered the call and not during but *after* processing of the initially detected audible signal. This is so because, to the extent that the initially audible signal is analyzed by the controller of Goldberg et al., the signal is analyzed for the purpose of determining *when* to play the message (*which must therefore be played after processing is completed*).

Application No. 09/482,969

According to Goldberg et al., the determination as to whether a live person answered the call is completed *after* the call is answered. The monitored parameters include, *inter alia*, the number of rings before the call is answered (parameter 124 in Figure 1) and the frequency of the tone of an answering device if an answering device answers the phone (parameter 128 in Figure 1), and optionally the duration of the speech energy in the answering greeting before the first brief silent "pause." (Col. 6, lines 1-21.) The measurement of these parameters can be finalized no earlier than answering of the call.

The Examiner indicates that, because Goldberg et al. teaches that historical parameters may be used in determining when to play a message in a later phone call and because signal processing can occur throughout the call, it is possible that processing of an initially detected audible signal in the second call can occur during the playing of the message. This conclusion is neither explicitly nor implicitly discussed in Goldberg et al., and conflicts with the clear teachings of Goldberg et al. Although Goldberg et al. teaches the placement of a second phone call to the intended recipient when the message was not effectively delivered in a first phone call, the determination as to whether a live person answered the phone in the second call is also made after the second call is answered. In this regard, Goldberg et al. at column 4, lines 40-49 as follows:

Analysis of both the historical monitored data from the first phone call and the real-time parameters of the second phone call in determining when to play the recorded message in the second phone call is desirable because basing the decision for the second phone call solely on the historical results of the first phone call could result in a second unsuccessful attempt if the actions of the called party change after the first attempt (e.g., the answering machine answered the first phone call but the intended recipient answers the second phone call).

Application No. 09/482,969

(Emphasis added). Thus, Goldberg et al. *teaches away* from the factual scenario presented by the Examiner in which the message is played during the processing of an initial audible signal based on monitored parameters from a previous phone call to the same telephone number.

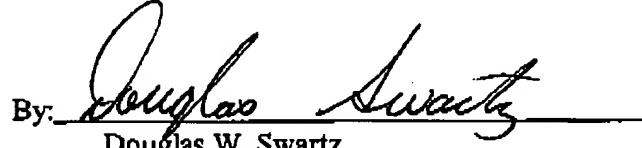
As noted in the previously filed Amendment and Response, Kelly, Jr., and Jesurum et al. further fail to overcome the deficiencies of Goldberg et al.

Accordingly, the pending claims are allowable.

The dependent claims provide further reasons for allowance. By way of example, Claims 23-25 require the call to be the initial or first call made to the party. This means that the claimed invention operates fully during each call.

Respectfully submitted,

SHERIDAN ROSS P.C.

By: 

Douglas W. Swartz
Registration No. 37,739
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700

Date: May 12, 2003